

**STATE OF MINNESOTA
OFFICE OF ADMINISTRATIVE HEARINGS
FOR THE BOARD OF HIGH PRESSURE PIPING SYSTEMS
MINNESOTA DEPARTMENT OF LABOR AND INDUSTRY**

In the Matter of the Proposed Rules of
the Board of High Pressure Piping
Systems Relating to High Pressure
Piping, Minnesota Rules Chapter 5230

**REPORT OF THE
ADMINISTRATIVE LAW JUDGE**

Administrative Law Judge Kathleen D. Sheehy conducted a hearing concerning the above rules beginning at 9:30 a.m. on February 11, 2009, at the Minnesota Department of Labor and Industry, 443 Lafayette Road North, Saint Paul, Minnesota. The hearing continued until all interested persons, groups, and associations had an opportunity to be heard concerning the proposed rules.

The hearing and this Report are part of a rulemaking process governed by the Minnesota Administrative Procedure Act.¹ The legislature has designed the rulemaking process to ensure that state agencies have met all of the requirements that Minnesota law specifies for adopting rules. Those requirements include assurances that the proposed rules are necessary and reasonable, that they are within the agency's statutory authority, and that any modifications that the agency may have made after the proposed rules were initially published are not impermissible substantial changes.

The rulemaking process includes a hearing when a sufficient number of persons request that a hearing be held. The hearing is intended to allow the agency and the Administrative Law Judge reviewing the proposed rules to hear public comment regarding the impact of the proposed rules and what changes might be appropriate. The Administrative Law Judge is employed by the Office of Administrative Hearings, an agency independent of the Board of High Pressure Piping Systems (Board) and the Department of Labor and Industry (Department).

Wendy Willson Legge, Attorney for the Board of High Pressure Piping Systems, Minnesota Department of Labor and Industry; Larry Stevens, Jr., Chair of the Board of High Pressure Piping Systems; Todd Green, Chief Inspector, High Pressure Piping Inspection Unit; and Annette Trnka, Board, Council and Rulemaking Assistant, appeared at the rule hearing on behalf of the Board. Seventeen members of the public signed the hearing register, and 15 members of the public spoke at the hearing.

The Board received many written comments on the proposed rules before the hearing. After the hearing, the record remained open until March 3, 2009, to allow interested persons and the Board an opportunity to submit written comments. Following

¹ Minn. Stat. §§ 14.131 through 14.20 (2008).

the initial comment period, the record remained open for an additional five working days to allow interested persons and the Board the opportunity to file a written response to the comments submitted. The OAH hearing record closed on March 10, 2009. All of the comments received were read and considered.

SUMMARY OF CONCLUSIONS

With one exception, the Department has established that it has the statutory authority to adopt the proposed rules and that the proposed rules are necessary and reasonable. The Department did not establish that it has the statutory authority to adopt the definition of “repairs on existing installation” in Minn. R. 5230.0005, subp. 16, and that proposed subpart is legally defective.

Based upon all the testimony, exhibits and written comments, the Administrative Law Judge makes the following:

FINDINGS OF FACT

Nature of the Proposed Rules

1. This rulemaking proceeding concerns proposed amendments to the rules governing Minnesota’s high pressure piping systems. The proposed rules include amendments to both the high pressure piping code and the licensing provisions of existing rules. The proposed rules primarily incorporate by reference the American Society of Mechanical Engineers (ASME) standards for completing installation of high pressure piping systems.

2. Minnesota Statutes sections 326B.90 to 326B.925 (2008) are known as the Minnesota High Pressure Piping Act. Under this Act, the Board was granted rulemaking authority to adopt Minnesota’s High Pressure Piping Code,² and to “adopt rules that regulate the licensure or registration of high pressure piping contractors, journeymen, and other persons engaged in the design, installation, and alteration of high pressure piping systems.”³

3. The technical specifications for the Minnesota High Pressure Piping and Code for Power Piping Systems have not been updated since 1993. The proposed rules incorporate the provisions of national model codes, including:

The American Society of Mechanical Engineers’ (ASME) 2005 edition of the Bioprocessing Equipment Standard (ASME BPE)

ASME’s 2007 edition of the Boiler and Pressure Vessel Code, section I (ASME Code for Power Boilers)

ASME’s 2007 edition of the standard for power piping (ASME B31.1)

ASME’s 2006 edition of the standard for ammonia refrigeration piping (ASME B31.5)

² Minn. Stat. § 326B.925, subd. 2(a)(3).

³ Minn. Stat. § 326B.925, subd. 2(a)(5).

American National Standards Institute (ANSI) and the International Institute of Ammonia Refrigeration's (IIAR) 2008 revision of the standard for Equipment, Design, and Installation of Closed-Circuit Ammonia Mechanical Refrigeration Systems (ANSI/IIAR 2)

ASME's 2007 edition of the Boiler and Pressure Vessel Code, section IX (ASME section IX).

4. The proposed rules generally adopt the provisions of the model codes; however, the rules modify some model code provisions in instances when the Board has determined the modifications are appropriate and consistent with Minnesota conditions and practice.

5. In developing the proposed rules, the Board created the following committees of Board members: Ammonia Committee, Bioprocess Committee, Licensing Committee, Steam Committee, and Welding Committee. These committees held public meetings, created and reviewed drafts of possible rule amendments, and referred drafts to the full Board for review.

6. "High pressure piping" is defined as "all high pressure piping used in the installation of hot water or steam heating boilers, any systems of piping hot water or other medium used for heating that exceed 30 p.s.i. gauge and 250 degrees Fahrenheit, or any system of high pressure steam, ammonia piping, or bioprocess piping, but shall not include any high pressure piping under the direct jurisdiction of the United States." By statute, individuals and businesses that engage in or work at the business of a contracting high pressure pipefitter or work as a journeyman high pressure pipefitter must be licensed. A "contracting high pressure pipefitter" means an individual:

such as a steamfitter, engaged in the planning, superintending, and practical installation of high pressure piping and appurtenances, and otherwise lawfully qualified to construct high pressure piping installations and make replacements to existing plants, who is also qualified to conduct the business of high pressure piping installations and who is familiar with the laws, rules, and minimum standards governing them.⁴

A journeyman high pressure pipefitter is an individual engaged in the installation of high pressure piping who is employed by a contracting high pressure pipefitter.⁵ The statute also provides that "[n]o license shall be required for repairs on existing installations."⁶

7. The most controversial rule amendment proposed by the Board is its definition in Minn. R. 5230.0005, subp. 16, of the statutory phrase "repairs on an existing installation." The Board is proposing a narrow definition of this term, which would limit such repairs to the in-kind replacement of manufactured parts. The proposed rule would not include cutting, welding, or threading of pipe. According to the

⁴ Minn. Stat. § 326B.91, subd. 3.

⁵ *Id.*, § 326B.91, subd. 6.

⁶ *Id.*, § 326B.921, subd. 1.

Board, the cutting, welding, and threading of pipe requires the highest level of pipefitter skills and should require a license in order to best protect the public. The Board maintains that the proposed definition is consistent with the Department's longstanding interpretation of the statute.⁷

8. The Board has proposed an effective date of August 1, 2010, for the new definition of "repairs on an existing installation." The Board maintains that the delay will allow affected parties time to either train and license their workforce to comply with the statutes and rules or to seek legislation that would broaden the definition of "repairs" to include more highly skilled work and require qualifications for individuals who perform this highly skilled work.⁸

Rulemaking Legal Standards

9. Under Minn. Stat. § 14.14, subd. 2, and Minn. Rule 1400.2100, a determination must be made in a rulemaking proceeding as to whether the agency has established the need for and reasonableness of the proposed rule by an affirmative presentation of facts. In support of a rule, an agency may rely upon legislative facts, namely general facts concerning questions of law, policy and discretion, or it may simply rely upon interpretation of a statute, or stated policy preferences.⁹ The Board prepared a Statement of Need and Reasonableness (SONAR) in support of the proposed rules. At the hearing, the Board primarily relied upon the SONAR as its affirmative presentation of need and reasonableness for the proposed rule. The SONAR was supplemented by comments made by Board representatives at the public hearing and in written post-hearing submissions.

10. The question of whether a rule has been shown to be reasonable focuses on whether it has been shown to have a rational basis, or whether it is arbitrary, based upon the rulemaking record. Minnesota case law has equated an unreasonable rule with an arbitrary rule.¹⁰ Arbitrary or unreasonable agency action is action without consideration and in disregard of the facts and circumstances of the case.¹¹ A rule is generally found to be reasonable if it is rationally related to the end sought to be achieved by the governing statute.¹²

11. The Minnesota Supreme Court has further defined an agency's burden in adopting rules by requiring it to "explain on what evidence it is relying and how the evidence connects rationally with the agency's choice of action to be taken."¹³ An agency is entitled to make choices between possible approaches as long as the choice made is rational. Generally, it is not the proper role of the Administrative Law Judge to

⁷ Tr. at 15-16.

⁸ *Id.*

⁹ *Mammenga v. Department of Human Services*, 442 N.W.2d 786 (Minn. 1989); *Manufactured Housing Institute v. Pettersen*, 347 N.W.2d 238, 244 (Minn. 1984).

¹⁰ *In re Hanson*, 275 N.W.2d 790 (Minn. 1978); *Hurley v. Chaffee*, 231 Minn. 362, 367, 43 N.W.2d 281, 284 (1950).

¹¹ *Greenhill v. Bailey*, 519 F.2d 5, 19 (8th Cir. 1975).

¹² *Mammenga*, 442 N.W.2d at 789-90; *Broen Memorial Home v. Department of Human Services*, 364 N.W.2d 436, 444 (Minn. Ct. App. 1985).

¹³ *Manufactured Housing Institute*, 347 N.W.2d at 244.

determine which policy alternative presents the “best” approach since this would invade the policy-making discretion of the agency. The question is rather whether the choice made by the agency is one that a rational person could have made.¹⁴

12. In addition to need and reasonableness, the Administrative Law Judge must also assess whether the rule adoption procedure was complied with, whether the rule grants undue discretion, whether the Board has statutory authority to adopt the rule, whether the rule is unconstitutional or illegal, whether the rule constitutes an undue delegation of authority to another entity, or whether the proposed language is not a rule.¹⁵

13. In this matter, the Board has proposed one revision to the proposed rule language after the proposed rules were published in the *State Register*. Thus, the Administrative Law Judge must also determine if the new language is substantially different from that which was originally proposed.¹⁶

Procedural Requirements of Chapter 14

14. On May 12, 2008, the Board published a Request for Comments on the proposed rules. The Request for Comments was published at 32 S.R. 2025.¹⁷

15. In a letter dated November 12, 2008, the Board requested permission to omit the text of the proposed rules from its publication of the Dual Notice in the *State Register* on the grounds that publication of the twenty-two page text would be cumbersome, expensive, and inexpedient.

16. In a letter dated November 18, 2008, Chief Administrative Law Judge Raymond R. Krause authorized the Board to omit the text of its proposed rules from publication of its Dual Notice in the *State Register* pursuant to Minn. Stat. § 14.22, subd. 1(b).¹⁸

17. By letter dated December 1, 2008, the Board requested that the Office of Administrative Hearings schedule a hearing on the proposed rules and assign an Administrative Law Judge. Along with the letter, the Board filed a proposed Dual Notice of Intent to Adopt Rules without a Public Hearing and Notice of Hearing if 25 or More Requests for Hearing are Received, a copy of the proposed rules, and a draft of the Statement of Need and Reasonableness (SONAR). The Board also requested that the Office of Administrative Hearings give prior approval of its Additional Notice Plan. Under the Plan, the Board represented that it would mail a Notice of Hearing to organizations representing pipefitters, plumbers, gasfitters, plumbing contractors, plumbing engineers, building officials, builders, building owners and managers, mechanical contractors, general contractors, utility contractors, civil engineers, counties, cities, townships, local inspectors, and heating and cooling contractors. In addition, the Board noted that it would directly notify all of the individuals and entities on the Department’s rulemaking mailing list for high pressure piping rules.

¹⁴ *Federal Security Administrator v. Quaker Oats Co.*, 318 U.S. 218, 233 (1943).

¹⁵ Minn. R. 1400.2100.

¹⁶ Minn. Stat. § 14.15, subd. 3 (2006).

¹⁷ Ex. 1.

¹⁸ Ex. 5.

18. Administrative Law Judge Kathleen Sheehy was assigned to the rule hearing and on December 4, 2008, the Board submitted a modified Dual Notice substituting her name for that of Chief Judge Raymond Krause.

19. In a letter dated December 4, 2008, Administrative Law Judge Kathleen Sheehy approved the Board's Dual Notice and Additional Notice Plan.

20. On December 10, 2008, the Board mailed a copy of the SONAR to the Legislative Reference Library as required by law¹⁹ and mailed copies of the Dual Notice, proposed rules, and SONAR to the chairs, chief authors, and ranking minority members of designated legislative committees.²⁰

21. On December 18, 2008, the Board electronically mailed a copy of the Dual Notice to all interested parties on the Board's E-mail List.²¹

22. On December 19, 2008, the Board mailed a copy of the Dual Notice to all persons and associations who had registered their names with the Department for purpose of receiving such notice and to all persons identified in the Additional Notice Plan.²²

23. On December 22, 2008, a copy of the Dual Notice was published in the *State Register* at 33 S.R. 1104.²³

24. On the day of the hearing the Board placed the following documents in the record:

- The Request for Comments on Possible Amendment to Rules Governing High Pressure Piping, published May 12, 2008, at 32 SR 2025. (Ex. 1);
- A copy of the proposed rules with Revisor's approval dated November 14, 2008 (Ex. 2);
- A copy of the SONAR (Ex. 3);
- Certificate of Mailing the SONAR to the Legislative Reference Library, with cover letter dated December 10, 2008 (Ex. 4);
- Letter dated November 18, 2008, from Chief Administrative Law Judge Raymond Krause authorizing the Board to omit text of proposed rules from publication of Dual Notice in the *State Register* (Ex. 5);
- A copy of the Dual Notice as published in 33 S.R. 1104 (Ex. 6);
- Original Dual Notice dated December 9, 2008 (Ex. 7);
- Certificate of Accuracy of the Mailing List, with mailing list (Ex. 8);
- Certificate of Mailing the Dual Notice to the Rulemaking Mailing List on December 19, 2008 (Ex. 9);

¹⁹ Ex. 4.

²⁰ Ex. 13. See Minn. Stat. § 14.116.

²¹ Ex. 11.

²² Exs. 9 and 10.

²³ Ex. 6.

- Certificate of Mailing the Dual Notice to the Additional Notice List on December 19, 2008 (Ex. 10);
- Certificate of Mailing Electronically the Dual Notice to the Board's Interested Parties E-Mail List on December 18, 2008 (Ex. 11);
- Letter dated November 24, 2008, from Ryan Baumtrog, Executive Budget Officer, Minnesota Management & Budget, on behalf of the Commissioner of Finance stating that proposed rules will not impose significant cost on local governments (Ex. 12);
- Certificate of Mailing the Dual Notice and the SONAR to Legislators on December 10, 2008 (Ex. 13);
- Written public comments received during the public comment period (Exs. 14-89);
- Written public comments received after the public comment period ended (Exs. 90-95);
- Certificate of Mailing Dual Notice to Those who Requested a Hearing (Ex. 96);
- Photographs of improper pipe welds (Ex. 97 and Ex. 98); and
- Letter dated November 29, 2006, from Scott Brener, then Commissioner of Department of Labor & Industry, to Xcel Energy's Vice President and General Counsel, Plant Director, and Superintendent (Ex. 99).

25. Written comments received after the hearing (Exs. 100-105, 107, 109-112) and the Board's responses (Exs. 106 and 108) were also marked and placed in the record.

Additional Notice

26. Minnesota Statutes §§ 14.131 and 14.23, require that the SONAR contain a description of the Board's efforts to provide additional notice to persons who may be affected by the proposed rules. The Board submitted an additional notice plan to the Office of Administrative Hearings, which reviewed and approved it by letter dated December 4, 2008. In addition to notifying those persons on the Department's rulemaking mailing list for high pressure piping rules, the Board represented that it would mail a Notice of Hearing to organizations representing pipefitters, plumbers, gasfitters, plumbing contractors, plumbing engineers, building officials, builders, building owners and managers, mechanical contractors, general contractors, utility contractors, civil engineers, fire chiefs, counties, cities, townships, local inspectors, and heating and cooling contractors.²⁴

27. A copy of the proposed rules, SONAR, and Dual Notice was also posted on the Board's webpage on the Department's website.²⁵

²⁴ SONAR at 5-6.

²⁵ SONAR at 6.

28. The Administrative Law Judge finds that the Department fulfilled its additional notice requirement.

Statutory Authorization

29. The legislature has divided the rulemaking authority in the area of high pressure piping between the Commissioner of Labor and Industry and the Board of High Pressure Piping Systems. Minn. Stat. § 326B.02, subd. 5, gives general rulemaking authority to the Commissioner of Labor and Industry except where the rulemaking authority is expressly transferred to the Board.²⁶

30. The Board's statutory authority to adopt these amendments is set forth in Minnesota Statutes § 326B.925, subdivision 2(a)(3) and (5):

Subd. 2. **Powers; duties; administrative support.** (a) The board shall have the power to:

. . .

(3) adopt the high pressure piping code that must be followed in this state and any high pressure piping code amendments thereto. The board shall adopt the high pressure piping code and any amendments thereto pursuant to chapter 14, and as provided in subdivision 6, paragraphs (b), (c), and (d);

. . .

(5) except for rules regulating continuing education, adopt rules that regulate the licensure or registration of high pressure piping contractors, journeymen, and other persons engaged in the design, installation, and alteration of high pressure piping systems, except for those individuals licensed under section 326.02, subdivision 2 and 3. The board shall adopt these rules pursuant to chapter 14 and as provided in subdivision 6, paragraphs (e) and (f);

. . .

31. The Board maintains that Minn. Stat. § 326B.925, subd. 2(a)(5) gives the Board statutory authority to adopt rules regulating the "licensure or registration of high pressure piping contractors, journeymen, and other persons engaged in the design, installation, and alteration of high pressure piping systems." The Department and the Board agree that the Board has the statutory authority to adopt rules in these subject areas.²⁷

32. The Administrative Law Judge finds that the Board has the statutory authority to adopt rules in these subject areas. The issue whether the proposed rules are consistent with the statute is addressed in the part by part analysis below.

²⁶ Tr. at 17.

²⁷ Tr. at 18-19.

Regulatory Analysis in the SONAR

33. The Administrative Procedure Act requires an agency adopting rules to consider seven factors in its Statement of Need and Reasonableness. The first factor requires:

(1) A description of the classes of persons who probably will be affected by the proposed rule, including classes that will bear the costs of the proposed rule and classes that will benefit from the proposed rule.

The Board identified owners of high pressure piping (HPP) systems, HPP contractors, and code enforcement authorities as the classes of persons who will be affected by, benefit from and bear the cost of the proposed rule.²⁸

(2) The probable costs to the Agency and to any other agency of the implementation and enforcement of the proposed rule and any anticipated effect on state revenues.

The Board states that because it is responsible only for adoption of the codes governing construction and installation of HPP systems and does not administer these provisions, it will not incur any costs associated with the adoption of these proposed rules.

The Department is responsible for supervising high pressure piping used on all projects in the State of Minnesota, and it employs the inspectors and other assistants who perform the inspections, or it enters into agreements with municipalities to perform inspections and to carry out the provisions of sections 326B.90 to 326B.925.²⁹ Costs to the Department include the cost of purchasing code books for state employees who inspect HPP systems or handle HPP code questions, as well as costs associated with revising license examinations to reflect the updated code. Adoption of the proposed rules will not, according to the Board, have any effect on state revenues.³⁰

(3) The determination of whether there are less costly methods or less intrusive methods for achieving the purpose of the proposed rule.

The High Pressure Piping and Code for Power Piping Systems has not been technically updated since 1993. The Board states that adopting a model code by reference is the least costly method of adopting a national model code, in accordance with statutory requirements.³¹

(4) A description of any alternative methods for achieving the purpose of the proposed rule that were seriously considered by the

²⁸ SONAR at 3.

²⁹ See Minn. Stat. § 326B.90; § 326B.92, subd. 2.

³⁰ SONAR at 4.

³¹ SONAR at 4.

agency and the reasons why they were rejected in favor of the proposed rule.

The Board states that no other methods were considered for achieving the purpose of the proposed rules. The American Society of Mechanical Engineers (ASME) and the International Institute of Ammonia Refrigeration (IIAR) are the only organizations that publish codes relating to design and construction of HPP that are generally accepted and in use throughout the United States.³²

(5) The probable costs of complying with the proposed rules, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals.

In its SONAR, the Board addressed the anticipated cost of revisions to the high pressure piping code. It states that contractors, HPP system designers, and government inspection departments will need to purchase copies of ASME B31.1 (2007 edition), ANSI/IIAR 2 (2008 edition), ASME B31.5 (2006 edition), ASME BPE (2005 edition), ASME section IX (2007 edition), and ASME Code for Power Boilers (section I) (2007 edition). These groups and individuals will also need to either purchase or print from the Web the updated Minnesota High Pressure Piping and Code for Power Piping Systems. Training curricula will likewise need to be updated to incorporate any new or revised provisions in the code.

The cost to purchase each of the code books is: ASME B.31.1 (\$315), ANSI/IIAR 2 (\$80), ASME B31.5 (\$140), ASME BPE (\$205), ASME section IX (\$450), and ASME Boiler and Pressure Vessel Code (section I) (\$395).³³

In written post hearing comments, the International Brotherhood of Electrical Workers (IBEW) Locals 23, 160, and 949, asserts that the Board has completely failed to address the cost of its proposed definition of “repairs on existing installations,” at Minnesota Rule 5230.0005, subp. 16. The IBEW contends that this definition will require that only licensed pipefitters perform welding repair work and that it will result in significant costs relating to the retraining and licensing of company workforces or the hiring of outside licensed contractors to perform repair work that would require licensure under the proposed rule. The IBEW also noted that costs incurred by Xcel Energy for retraining staff or hiring outside licensed steamfitters will likely be passed on to ratepayers.³⁴

According to Mr. Don Baxa, a maintenance manager at Xcel’s Sherco plant, the increased cost to Xcel of licensing repair work could run as high as \$854,000 a year.³⁵ Mr. Baxa arrived at this figure by determining the cost of employing contractors to perform the number of hours of work that Xcel’s own (unlicensed) steamfitter-welders spend annually performing repair work on high pressure piping systems.³⁶ It includes

³² SONAR at 4.

³³ SONAR at 4.

³⁴ Ex.104 at 22-24.

³⁵ Tr. at 140.

³⁶ Tr. at 141-142.

the labor costs associated with procuring outside contractors, the costs associated with potential injuries on the job, and the cost of conducting security background checks.³⁷

The Board maintains that Xcel and IBEW have grossly overestimated the probable costs of complying with the licensure requirements flowing from the proposed definition of “repairs on existing installations.” Xcel based its calculations on the need to license all 42 of its steamfitter-welders who currently repair Xcel’s HPP systems. The Board contends that Xcel’s 15 employees who work at its two nuclear locations are under federal jurisdiction and are not subject to the licensing requirements. In addition, the Board asserts that Xcel could restructure its pipefitting work to require fewer than 27 licensed pipefitters, since not all of the work performed by Xcel’s pipefitters is high pressure piping work.³⁸ In responsive comments, the Board maintains that it would cost no more than \$34,000 for Xcel to license its current workers.³⁹ Accordingly, the Board recognizes that there will be costs involved in the adoption of its rule.

Although the estimated costs to license Xcel’s steamfitter-welders may or may not be accurate, the fact remains that in its SONAR the Board made no effort to estimate the financial impact of this portion of its proposed rule. It estimated only the cost of purchasing code books. The costs of licensing or replacing steamfitter-welders who currently perform cutting, welding, and threading of pipe in the course of repairing an existing installation will not be limited to Xcel Energy, but will be applicable to all owners of the other 981 HPP systems in Minnesota. There is nothing in the record to demonstrate what the financial impacts on those owners are likely to be.

(6) The probable costs or consequences of not adopting the proposed rule, including those costs borne by individual categories of affected parties, such as separate classes of governmental units, businesses, or individuals.

The Board states that if the updated ASME and ANSI/IIAR codes are not adopted, the State of Minnesota would be required to continue to operate under the current rules, which do not incorporate all of the latest technologies and safety practices in the HPP field.⁴⁰ The probable costs of this missed opportunity are not clear from the record.

(7) An assessment of any differences between the proposed rules and existing federal regulation and a specific analysis of the need for and reasonableness of each difference.

The Board states that there are no applicable federal regulations that address HPP code issues in the construction of non-federally owned HPP systems.⁴¹

34. The Administrative Law Judge finds that the Board has not demonstrated that it has adequately considered the probable costs of adopting the proposed definition

³⁷ Tr. at 141-142.

³⁸ Ex. 106 at 10-12.

³⁹ Ex. 108 at 6.

⁴⁰ SONAR at 5.

⁴¹ SONAR at 5.

of “repair of existing installations,” including the costs that would be borne by businesses. The Board has adequately considered the cost of revisions to the high pressure piping code, and it has adequately considered the other factors in the regulatory analysis required by Minn. Stat. § 14.131.

Performance Based Rules

35. The Administrative Procedure Act⁴² also requires an agency to describe how it has considered and implemented the legislative policy supporting performance based regulatory systems. A performance based rule is one that emphasizes superior achievement in meeting the agency’s regulatory objectives and maximum flexibility for the regulated party and the agency in meeting those goals.⁴³

36. The Board states that, with the exception of the licensing rules, the proposed rules are based largely on national model codes which are “generally performance-based.” According to the Board, the proposed amendments to the licensing rules will also implement performance-based standards by ensuring that individuals performing high pressure piping work have the necessary knowledge and expertise to perform the work in compliance with all relevant codes.⁴⁴

37. The Administrative Law Judge finds that the Board has met the requirements set forth in Minn. Stat. § 14.131 for assessing the impact of the proposed rules, including consideration and implementation of the legislative policy supporting performance-based regulatory systems.

Consultation with the Commissioner of Finance

38. Under Minn. Stat. § 14.131, the Agency is also required to “consult with the commissioner of finance to help evaluate the fiscal impact and fiscal benefits of the proposed rule on units of local government.”

39. The Board consulted with the Department of Finance, and in a response dated November 24, 2008, the Minnesota management and Budget’s Executive Budget Officer Ryan Baumtrog concluded that the proposed rules “will not impose a significant cost on local governments.”⁴⁵

40. The Administrative Law Judge finds that the Board has met the requirements set forth in Minn. Stat. § 14.131.

Compliance Costs to Small Businesses and Cities

41. Under Minn. Stat. § 14.127, the Board must “determine if the cost of complying with a proposed rule in the first year after the rule takes effect will exceed \$25,000 for: (1) any one business that has less than 50 full-time employees; or (2) any one statutory or home rule charter city that has less than ten full-time employees.”⁴⁶

⁴² Minn. Stat. § 14.131.

⁴³ Minn. Stat. § 14.002.

⁴⁴ SONAR at 5.

⁴⁵ SONAR at 6; Ex. 12.

⁴⁶ Minn. Stat. § 14.127, subd. 1.

The Board must make this determination before the close of the hearing record, and the Administrative Law Judge must review the determination and approve or disapprove it.⁴⁷

42. The Board has determined that the cost of complying with the proposed rule in the first year after it takes effect will not exceed \$25,000 for any one small business or small city. The probable costs are expected to be limited to the costs of purchasing new code books and modifying training curricula.⁴⁸

43. The Administrative Law Judge finds that the agency has made the determination required by Minn. Stat. § 14.127 with regard to proposed revisions to the high pressure piping code, but that it has not demonstrated that it has made any analysis of the cost of compliance for small business owners with its proposed definition of “repairs to existing installations.”

Analysis of the Proposed Rules

General

44. This report is limited to discussion of the portions of the proposed rules that received significant comment or otherwise need to be examined. When rules are adequately supported by the SONAR or the Board’s oral or written comments, a detailed discussion of the proposed rules is unnecessary. The agency has demonstrated the need for and reasonableness of all rule provisions not specifically discussed in this report by an affirmative presentation of facts. All provisions not specifically discussed are authorized by statute and there are no other problems that would prevent the adoption of the rules.

Discussion of Proposed Rule

Part by Part Analysis

5230.0005 Definitions

45. This section defines the terms used in parts 5230.0005 to 5230.5920 and Minnesota Statutes, sections 326B.91 and 326.921 to 326B.925.

46. The Board has proposed the following definition at subpart 14 of 5230.0005 to read as follows:

Subp. 14. **Piping system.** “Piping system” means the method of conveying liquid, vapor, steam, water, ammonia, or other medium from one point to another and includes all component parts, accessories, apparatus, equipment, or appurtenances necessary for proper and safe operation according to this chapter. Piping system includes pipes, flanges, bolting, gaskets, valves, fittings, the pressure-containing elements or portions of the system, piping and equipment supporting elements, hangers, or structural attachments.

⁴⁷ Minn. Stat. § 14.127, subd. 2.

⁴⁸ SONAR at 6-7.

47. This definition is intended to further explain the meaning of “ammonia piping systems,” “bioprocess piping systems,” “high pressure piping systems,” and “steam or heating media piping system” in other subparts of the proposed rule. The Board states that the definition is reasonable because it is consistent with common use and understanding within the industry.

48. The Board proposes to delete the current definition of “power piping systems” in Minn. R. 5230.0260, which provides as follows:

“Power piping systems” shall be understood to include all steam piping and the component parts such as pipe, flanges, bolting, gaskets, valves, and fittings, within or forming a part of the above-mentioned plants, including central and district heating steam or hot water distribution piping away from the plant building heating piping when the pressure exceeds 15 psi gage for steam, or 30 psi gage for hot water and a temperature exceeding 250 degrees Fahrenheit, whether the piping is installed underground or elsewhere.

49. In identical written comments received before the hearing, Xcel Energy engineering and plant managers objected to the Board’s proposed definition of “piping system” as vague and overly broad. Xcel points out that the proposed definition is broader than the current definitions of “power piping systems” and “piping” found at Minn. R. 5230.0260 and 5230.5020, subp. 51, in that it expands the definition to include “accessories, apparatus, equipment, or appurtenances necessary for proper and safe operation.” Xcel notes that the terms “accessories” and “appurtenances” arguably include instrumentation, an area in which licensed pipefitters should not be required.⁴⁹

50. Xcel proposes modifying the Board’s definition of “piping system” as follows:

“Piping system” means all piping and the component parts thereof required by reference in this chapter, including pressure-containing elements such as pipe, flanges, bolting, gaskets, valves, and fittings necessary for conveying liquid, vapor, steam, water, ammonia, or other medium from one point to another and supporting elements such as hangers, supports, and structural attachments.⁵⁰

51. Xcel asserts that its proposed definition is consistent with the definition of “piping” found at paragraph 100.1.1 of ASME B31.1. According to Xcel, the Board’s definition is inconsistent with nationally accepted standards and would include system parts not specifically intended to retain pressure or prevent overstressing.

52. In its written response filed after the hearing, the Board contends that it is reasonable to include “appurtenances” in the definition of piping systems because the statutory definitions of “contracting high pressure pipefitter” and “journeyman high pressure pipefitter” include “appurtenances.”⁵¹ According to the Board, the other words

⁴⁹ Exs. 49 – 70 and 90-93.

⁵⁰ Exs. 49-70, and 90-93.

⁵¹ See, Minn. Stat. § 326B.91, subd. 3 and subd. 6.

in the phrase to which Xcel objects (accessories, apparatus, and equipment) merely expand on the meaning of “appurtenances.” In addition, the American Heritage Dictionary identifies “apparatus,” “instruments,” and “equipment” as synonyms of “appurtenances.” For all of these reasons, the Board maintains that the proposed definition of “piping system” is reasonable.⁵²

53. The Administrative Law Judge finds the Board’s proposed definition of “piping system” to be needed and reasonable and is consistent with the Legislature’s statutory definitions of “contracting high pressure pipefitter” and “journeyman high pressure pipefitter.”

54. The Board has proposed the following definition at subpart 16 of 5230.0005 to read as follows:

Subp. 16. **Repairs on an existing installation.** “Repairs on existing installation” means the in-kind replacement of:

- A. manufactured threaded nipples up to six inches in length; or
- B. flanged or threaded valves, strainers, traps, or fittings, or gaskets for these items.

55. The phrase “repairs on existing installations” is found in Minnesota Statutes § 326B.921, subd. 1. This statute requires that individuals and businesses be licensed in order to construct or install high pressure piping; however, the statute states that no license is required for “repairs on existing installations.”

56. In relevant part, Minnesota Statutes § 326B.921, subd. 1, reads as follows:

No individual shall engage in or work at the business of a contracting high pressure pipefitter unless issued a contracting high pressure pipefitter license to do so by the department under rules adopted by the board. *No license shall be required for repairs on existing installations.* No individual shall engage in or work at the business of journeyman high pressure pipefitter unless issued a journeyman high pressure pipefitter competency license to do so by the department under rules adopted by the board. An individual possessing a contracting high pressure pipefitter competency license may also work as a journeyman high pressure pipefitter.

No person shall construct or install high pressure piping, nor install high pressure piping in connection with the dealing in and selling of high pressure pipe materials and supplies, unless, at all times, an individual possessing a contracting high pressure pipefitter competency license or a journeyman high pressure pipefitter competency license is responsible for ensuring that the high pressure pipefitting work is in conformity with Minnesota Statutes and Rules.

⁵² Ex. 106 at 13.

The board shall prescribe rules, not inconsistent herewith, for the examination and competency licensing of contracting high pressure pipefitters and journeyman high pressure pipefitters and for issuance of permits by the department and municipalities for the installation of high pressure piping.⁵³

57. Minnesota Statutes 326B.91, subd. 3, defines “contracting high pressure pipefitter” to mean as follows:

[A]n individual, such as a steamfitter, engaged in the planning, superintending, and practical installation of high pressure piping and appurtenances, and otherwise lawfully qualified to construct high pressure piping installations and make replacements to existing plants, who is also qualified to conduct the business of high pressure piping installations and who is familiar with the laws, rules, and minimum standards governing them.

58. A “journeyman high pressure pipefitter” is defined to mean an individual, such as a steamfitter, who is not a contracting high pressure pipefitter and who is engaged in the practical installation of high pressure piping and appurtenances in the employ of a contracting high pressure pipefitter.⁵⁴ “High pressure piping” means all high pressure piping used in the installation of hot water or steam heating boilers, any systems of piping hot water or other medium used for heating that exceed 30 p.s.i gauge and 250 degrees Fahrenheit, or any system of high pressure steam, ammonia piping, or bioprocess piping, but shall not include any high pressure piping under the direct jurisdiction of the United States.⁵⁵

59. By statute, therefore, a license is required to construct or install high pressure piping systems. A license is not required for persons performing “repairs on existing installations.”

60. The issue presented in this rule hearing, and the one that generated the vast majority of the comments, is whether the Board has the authority to adopt a rule defining the phrase “repairs on existing installations,” and, if it does, whether it may define the phrase in the restrictive manner it has proposed. Specifically, by limiting the definition of “repairs” to only the in-kind replacement of manufactured parts, the Board’s proposed definition will require that all repair work involving the cutting, threading or welding of pipe be performed only by licensed high pressure pipefitters.

Need for and Reasonableness of the Proposed Definition

61. In its SONAR, the Board states that the proposed definition is needed to affirm the long standing interpretation by the Department’s high pressure piping inspection unit that the term “repairs on existing installations” does not include work involving the cutting, welding or threading of pipe. According to the Board, some HPP owners and contractors have interpreted this term as allowing for the complete

⁵³ Emphasis added.

⁵⁴ Minn. Stat. § 326B.91, subd. 6.

⁵⁵ *Id.*, subd. 4.

replacement of high pressure piping systems by unlicensed workers, including the welding of new piping joints, so long as no additions or alterations are made.⁵⁶

62. The Board asserts that it is reasonable and necessary to prohibit unlicensed individuals from performing welding on high pressure piping because the Department has found “many instances of terrible welding by unlicensed persons.”⁵⁷ The Board believes the proposed definition reasonably restricts unlicensed individuals to work that requires the least skill and is the least dangerous. Given that repair work does not require a permit or inspection by the Department, the Board maintains it is reasonable to limit “repairs” to only the replacement of manufactured piping components in existing high pressure piping systems and to exclude the unlicensed and unpermitted replacement of pipe.⁵⁸

63. The Board states that if the definition of “repairs on existing installation” were to include the replacement of welded high pressure piping, any owner of high pressure piping could replace an entire existing piping system (either piecemeal or all at one time) without any license or permit. This, according to the Board, would be contrary to the public safety intent of the high pressure piping laws and would favor private interests over the interests of the public. The Board insists that the Legislature could not have intended that the bulk of high pressure piping work be excluded from licensing and inspection.⁵⁹

64. As an initial matter, the IBEW disputes the claim that the Department’s policy position is one of long standing. The IBEW points out that in 1992, the Department approved Xcel’s welding policy as being consistent with the intent of Minn. Stat. § 326.48, subd. 1 (the predecessor statute, which similarly excluded “repairs” from licensure requirements). The Xcel policy defined repair as “all repair work needed to restore a HPP system to a safe and satisfactory operating condition without changing its designed pressure containing capabilities.” Examples of typical repairs included in the policy were: weld repair or replacement of existing pipe; addition of non-pressure parts to pressure parts; replacement of valves; welded repair to pipe hangers, supports, and guides; seal welding of threaded connections; and the addition of pipe material required to accomplish a repair, but not for the purpose of changing system routing. The Department further indicated that its review recognized that conditions may arise that are not clear and that further discussions may be necessary to determine if specific work is “repair” or is work that requires compliance with the requirements of the high pressure piping law. In 2006, the Department retracted that approval, maintaining that the Department determines what constitutes repair work on a “case by case basis.”⁶⁰ According to the IBEW, it is clear from this correspondence that the Department’s position on what constitutes a repair has fluctuated over time, and as recently as three years ago there was no fixed definition of what constitutes a repair. Therefore, the

⁵⁶ SONAR at 9.

⁵⁷ Exs. 97, 98, 107 and 108 at 7.

⁵⁸ SONAR at 9.

⁵⁹ Ex. 106 at 6.

⁶⁰ Exs. 99, 104 at 15, and 109 at 3.

IBEW contends that the Board's claim that its proposed definition of "repair" is "consistent with the Department's longtime interpretation"⁶¹ is without merit.⁶²

65. The IBEW also argued at the rule hearing that the Board has failed to show that the proposed definition of "repairs on existing installations" is necessary for safety reasons. The IBEW points out that non-licensed employees at Xcel and other power plants must complete extensive training and apprenticeship programs that are approved by the Department. Xcel's apprenticeship training is a four-year program, and every pipefitter-welder in Xcel's plants making repairs on existing installations has completed the program. Moreover, the IBEW maintains that these non-licensed workers have been performing welding work in Xcel's plants for decades with excellent safety results.⁶³

66. In comments at the rule hearing and in subsequent written submissions, Xcel argues that the Board's proposed definition of "repairs" is not needed. Xcel points out that, together with IBEW Locals 23, 160, and 949, it requires all of its in-house welders to complete a four-year apprenticeship program that it offers to train steamfitter welders. This program is registered with and regulated by the Department. Once apprentices complete the training and achieve journeymen status, they are required to verify their proficiency in all types of welding every three months. Xcel states that it makes sure that all persons making repairs on its high pressure piping systems have been properly trained and tested according to its accredited program.⁶⁴

67. Xcel also asserts in post-hearing comments that the Board has failed to show any concrete material benefit to requiring licensure for repairs on existing installations that outweigh the costs to utility companies of requiring licensure. Xcel also contends that the licensure requirement will not allow it to maintain its current flexibility and responsiveness unless significant additional expenditures are made.⁶⁵

68. Dwight Affeldt, who teaches at Xcel's welder training program, testified at the rule hearing about the quality, detail and history of Xcel's training program. Mr. Affeldt explained that welders in Xcel's four-year apprenticeship program are qualified in accordance with ASME Section 9, and that the training program often exceeds ASME's minimum level of requirements. Typically the program involves 180 hours of formal training at the Riverside Training Center and the rest of the time is spent in an apprenticeship working with journeymen steamfitters at various plants.⁶⁶

69. Xcel states that if the Board's proposed definition at subpart 16 is adopted, Xcel's steamfitter welders will be precluded from performing a significant amount of work.⁶⁷ Xcel employs approximately 40 "benefit welders" at its plants. It also employs "bench welders," who are welders Xcel hires for outage work. Combined, Xcel states it employs hundreds of qualified but non-licensed welders who will be

⁶¹ Tr. at 15-16.

⁶² Ex. 104 at 15-16.

⁶³ Tr. at 26-28.

⁶⁴ Tr. at 46-47; 64-67. Ex. 104 at 3-6.

⁶⁵ Ex. 105 at 3-4.

⁶⁶ Tr. at 64-66.

⁶⁷ Tr. at 48.

negatively affected by the Board's proposed definition in subpart 16.⁶⁸ Finally, Xcel asserts that the proposed definition will reduce its flexibility in making repairs on the spot.⁶⁹

70. At the rule hearing, Don Baxa, an employee at Xcel Energy's Sherburne County plant, praised Xcel Energy's welding program as a model for the nation and praised Xcel's excellent safety record. The Sherburne County plant employs 42 full-time steam fitter welders or welder specialists. Mr. Baxa believes that licensed pipefitters will add nothing of value to the safety and maintenance of high pressure piping systems. Instead, Mr. Baxa stated that if Xcel is required to use licensed pipefitters instead of its own in-house maintenance people to perform routine repairs, the result will be increased labor costs for Xcel and ultimately increased rates for consumers.⁷⁰

71. Finally, IBEW contends that the Board has failed to show that the proposed definition of "repairs on existing installations" is reasonable. IBEW argues that the change in the definition will result in costs for Xcel and other plants that have invested time and resources in training pipefitter welders to perform work at their facilities. The cost of relicensing all of the individuals who have already been trained in their apprenticeship programs will be significant, according to the IBEW.⁷¹

72. At the rule hearing, Mark Geisenhoff, global fix equipment leader for Flint Hills Resources at the Pine Bend refinery, expressed Flint Hill's opposition to the Board's proposed definition of "repair" in subpart 16. Mr. Geisenhoff stated that Flint Hills has well-qualified pipefitters and time-proven systems in place at its Pine Bend refinery that ensure the highest quality maintenance and repair of their steam piping and other pressurized equipment. Flint Hills employs approximately eight full-time pipefitters at its Pine Bend refinery who spend about half of their work hours maintaining and repairing the facility's steam system. According to Mr. Geisenhoff, the proposed definition would prevent these employees from performing most of the repairs and would force Flint Hills to use contract labor at additional cost to complete routine repair work.⁷²

73. In its post-hearing response, the Board states that while Xcel may believe that its training program for welders is rigorous and effective, neither the Board nor the Department are authorized to recognize a private program as an alternative to state licensing and inspection. The Board asserts that if Xcel wants the Legislature to recognize its training and inspection program as an alternate to state licensing and inspection, it must obtain that recognition from the Legislature. Moreover, the Board contends that the fact that Xcel recognizes the need for extensive training to safely perform welding work, supports the Board's attempt to define "repairs" as excluding the replacement and welding of pipes.⁷³

⁶⁸ Tr. at 70-71.

⁶⁹ Tr. 48-50.

⁷⁰ Tr. at 138-140, 147.

⁷¹ Tr. at 29.

⁷² Tr. at 90.

⁷³ Ex. 106 at 10.

74. The Board rejects the argument that its proposed definition would prohibit unlicensed workers from performing the majority of repair work they currently carry out. According to the Board, the proposed definition would allow certain unlicensed repair work, such as the replacement of manufactured valves, fittings, steam traps, flex joints that do not require cutting, welding, or threading.⁷⁴

75. In addition, the Board asserts that its proposed effective date of August 1, 2010, for the new definition of “repairs on an existing installation,” will allow affected parties enough time to either train and license their workforce to comply with the statutes and rules or to seek legislation that would broaden the definition of “repairs” to include more highly skilled work and require qualifications for individuals who perform this highly skilled work.⁷⁵

76. In a written comment received after the hearing, James Andrie, a member of the Board of High Pressure Piping, expressed his support for the Board’s proposed definition of “repairs on existing installations.” Mr. Andrie works primarily in the ammonia refrigeration industry, and he wrote that he has personally found several improper installations of high pressure piping material. He believes that the proposed definition is needed for the safety of the public and industry personnel, and he believes that the 2010 effective date will give plants enough time to train or hire staff in compliance with the rule.⁷⁶

77. In a written comment received after the hearing, Dave Leveille, General Manager Production Planning for Minnesota Power, expressed his support of the Board’s proposed rules and in particular the proposed definition of “repairs on existing installations.” Mr. Leveille states in his letter that the Department has long interpreted “repairs on existing installations” to exclude welding work. Based upon this interpretation, Minnesota Power undertook the licensing of its maintenance force. Minnesota Power now has a licensed work force that includes eight contracting license holders, five journeyman license holders, and seven registered unlicensed individuals at five locations within its service territory. Mr. Leveille maintains that the cost of licensing its staff was minimal and that it has resulted in greater reliability for the customers as well as a greater focus on safety.⁷⁷

78. In a written comment received after the hearing, Joe Potter, a licensed contractor pipefitter and code compliance engineer for American Crystal Sugar Company, expressed his support for the Board’s proposed rules. Mr. Potter has worked in the high pressure piping industry for over 20 years and has been a licensed pipefitter for 15 years. He states that it has been an unwritten rule in the high pressure piping industry and something he has always told his trainees that any repair that requires welding must only be performed by licensed pipefitters or registered trainees.⁷⁸

79. In a written comment received after the hearing, Todd Green, the Department’s Chief High Pressure Piping Inspector, stated that the Department has

⁷⁴ Ex. 106 at 10-12; Tr. at 15.

⁷⁵ Tr. at 16; Ex. 106 at 12.

⁷⁶ Ex. 102.

⁷⁷ Ex. 100.

⁷⁸ Ex. 103.

long interpreted the phrase “repair on an existing installation” to mean “no cutting, threading, or welding of pipe.” Mr. Green has been employed by the Department since November 1997, when he began working as a HPP inspector. According to Mr. Green, the Department interprets work that can be performed as a “repair” to include the replacement of “like for like” manufactured valves, strainers, steam traps, threaded fittings and manufactured pipe nipples, and appurtenances that would not require any additional pipe or rerouting of HPP systems. Mr. Green believes that this allows owners of piping systems to use unlicensed persons to perform day-to-day maintenance on items that wear out most often, while requiring little pipefitting knowledge or experience. In addition, he cautions that if the Department were to allow replacement of all parts on high pressure piping systems as a “repair,” there would be no inspection of piping system replacements, including welded piping joints. Because inspections are triggered by a permit application, and the Department does not require permits for “repair” work, the Department may never know that high pressure piping work has occurred. Mr. Green does not believe it is in the best interest of public safety to allow the performance of unlicensed welding of high pressure piping.⁷⁹

80. In its post hearing response comments, the Board states that the disagreement about the meaning of the word “repair” demonstrates the need for a uniform definition.⁸⁰

81. The Administrative Law Judge finds that the Board would be able to establish the need for and reasonableness of a rule that would provide guidance to the industry in differentiating between the construction and installation of high pressure piping and the repair of an existing installation. Even if the Department had a different view of what constituted a “repair” in the past, the Department and the Board are permitted to change their policy preference, and the adoption of a rule is preferable to an unwritten policy. The definition the Board proposes is not legally unreasonable, because it is rationally related to the public safety goals that support licensure requirements. The Administrative Law Judge concludes that the proposed definition should not be invalidated on the basis that it is not needed or reasonable. Whether the proposed definition is consistent with the statutory directive to exclude repair work from licensure, however, is a different matter.

Statutory Authority for the Proposed Definition

82. The Minnesota Legislature first adopted a licensing requirement for steamfitters in 1937.⁸¹ This statute required persons and corporations to be licensed by the State in order to engage in or work at the business of a contracting steamfitter or journeyman steamfitter.

83. Prior to 1984, the statute governing licensure of high pressure piping work (the predecessor statute to Minn. Stat. § 326B.921) provided the following regarding repair work:

⁷⁹ Ex. 107.

⁸⁰ Ex. 106 at 3.

⁸¹ See Laws of Minnesota 1937, Chapter 367, Section 5.

No license shall be required for *minor* repairs on existing installations, provided the repairs shall be made in compliance with the prescribed minimum standards of the department of labor and industry.⁸²

84. In 1984, the Minnesota Legislature enacted a number of changes to the high pressure piping laws, including instituting for the first time a statewide permit requirement for construction or installation of high pressure piping systems.⁸³ The Legislature also amended the language regarding unlicensed repair work to reflect the current statutory language: “No license shall be required for repairs on existing installations.” Both the word “minor” and the proviso regarding compliance with the Department’s minimum standards were deleted.

85. The Board asserts that it has the legal authority to adopt a rule defining the phrase “repairs on existing installations.” As stated in the Statutory Authority section of this report, the Board points out that Minn. Stat. § 326B.925, subd. 2(a)(5) grants it the power to adopt rules regulating the “licensure or registration of high pressure piping contractors, journeymen, and other persons engaged in the design, installation, and alteration of high pressure piping systems.” Because the phrase “repairs on existing installations” appears in the licensure statute and because a definition will identify the type of work that does not require licensure, the Board argues that adopting a rule defining this phrase falls within its rulemaking authority to regulate licensure.⁸⁴ In addition, the Board maintains that it is very common for agencies to adopt rules defining terms that appear in statutes where there is no statutory definition.

86. The International Brotherhood of Electrical Workers (IBEW) Locals 160, 23, and 949 oppose the Board’s proposed definition. The IBEW argues that Minn. Stat. § 326B.921 only authorizes the Board to require a license of persons performing the “design, installation, and alteration of high pressure piping systems.” The statute does not, according to the IBEW, permit the Board to regulate repair work. Instead, repair work is specifically exempted from the work that may be regulated under Chapter 326B.⁸⁵ According to the IBEW, because Minn. Stat. § 326B.921, subd. 1, specifically exempts repair work from the type of work requiring licensure, the Board lacks the authority to adopt rules regulating repair work.

87. In addition, the IBEW contends that by deleting the word “minor” from the statutory language, the Minnesota Legislature intentionally broadened the scope of repair work that may be performed by unlicensed workers to include all repair work, not just minor repairs. The IBEW contends that the Board’s attempt to greatly restrict unlicensed repair work by rule is contrary to the statute and the legislative history. According to the IBEW, the Legislature intentionally removed high pressure piping repair work from the Board’s regulatory ambit in 1984, and the Board should not be allowed to reinsert licensure requirements for most repair work by rule.⁸⁶ The IBEW maintains that the Board’s proposed definition exceeds the Board’s authority by inappropriately and unilaterally expanding the scope of activities that are licensed by the

⁸² See Minn. Stat. § 326.48, subd. 1 (1982) (emphasis added).

⁸³ 1984 Minn. Laws, Ch. 481, section 3 (codified as Minn. Stat. § 326.47, subd. 1).

⁸⁴ Ex. 108 at 2; Tr. at 18-19.

⁸⁵ Ex. 104 at 17.

⁸⁶ Ex. 106 at 12-14.

State.⁸⁷ According to the IBEW, the Board is not empowered to adopt any definition of the phrase “repairs on existing installations” that results in the licensure of repair work.⁸⁸

88. Similarly, Xcel argues that by limiting the type of repairs that can be done on existing installations, the Board’s proposed rule exceeds and conflicts with Minnesota Statutes 326B.921, subd. 1, and grants the Board discretion beyond what is allowed in the statute. Xcel maintains that the legislature expressly reserved from the agency’s licensing authority “repairs on existing installations.” Xcel argues that the Board is trying to re-establish, by rule, what the legislature struck from the Board’s licensing authority in 1984. Because Minn. Stat. § 326B.921, subd. 1, states that “No license shall be required for repairs on existing installations,” Xcel has for decades employed in-house qualified welders, who are not licensed pipefitters, to perform welding repairs at Xcel’s plants. Xcel argues that the Board’s proposed definition requiring that all welding work be performed by licensed pipefitters at the expense of other trades is contrary to the statute.⁸⁹

89. In its response comments, the Board argues that the act of replacing pipe, including specifically the cutting out of old pipe and the welding of new pipe, should be viewed as installation work rather than repair work. Because Minnesota statutes prohibit the installation of piping without a license, the Board maintains that “repairs” must be defined in such a way as to exclude this work.⁹⁰ The Board asserts that the disagreement in this rulemaking proceeding boils down to whether the words “install” and “installations” in the statutes are intended to refer only to new installations. The Board contends that the words are not limited to new installations and that anyone “installing” pipe on an existing installation needs to be licensed. Therefore, the Board claims that it is reasonable to define the phrase “repairs on existing installations” to exclude the welded replacement of piping.⁹¹

90. The IBEW counters that the fact that the Legislature imposed a permit requirement for the construction or installation of “high pressure piping systems” in 1984 supports its argument that repair work involving the addition of materials to existing systems did not require a permit or license.⁹² More specifically, the statute imposing the permit requirement provides that the Department must charge a filing fee of \$100 for a permit, and an inspection fee calculated as \$150 plus 0.022 of the first \$1,000,000, plus 0.011 of the next \$2,000,000, plus 0.00055 of the amount over \$3,000,000 of the cost of construction or installation. When an application is filed after the start of construction or installation, the fees are higher.⁹³

⁸⁷ Tr. at 24-26.

⁸⁸ Ex. 109 at 2.

⁸⁹ Exs. 49-70, and 90-93.

⁹⁰ Ex. 106 at 7-9. See Minn. Stat. § 326B.921, subd. 1, and § 326B.91, subd. 3.

⁹¹ Ex. 108 at 8.

⁹² Ex. 109 at 2-3.

⁹³ Minn. Stat. § 326B.92, subd. 3.

91. An agency's authority to regulate has been held to include the authority to restrict or prohibit,⁹⁴ and within the designated area of its regulation, the agency has the implied power to formulate necessary classifications and definitions.⁹⁵ However, while administrative agencies may adopt regulations to implement or make specific the language of a statute, they may not adopt a conflicting rule.⁹⁶ A rule is invalid if it conflicts with a statute,⁹⁷ is inconsistent with the statutory authority pursuant to which it was adopted,⁹⁸ is contrary to the legislative intent,⁹⁹ or adopts a standard beyond the scope of the agency's authority, express or implied, by the legislature.¹⁰⁰

92. The licensing statute unambiguously requires licensure of persons involved in the construction or installation of high pressure piping, and it excludes from licensure persons performing repair work on existing plants. The Board itself has recognized this limitation in its proposed rule regarding remedies for licensing violations, which requires the removal of high pressure piping "constructed by" or "installed by" a person who is not licensed, and which further provides that the high pressure piping system that includes the unauthorized piping or installation "cannot be placed in service" unless and until the unauthorized piping or installation is replaced with high pressure piping "constructed by" or "installed by" a licensed person.¹⁰¹

93. The Administrative Law Judge is not persuaded by the Board's argument that any cutting or welding of pipe should be viewed as an "installation" requiring both a permit and a license. The statute requires licensure of persons engaged in the work of a contracting high pressure pipefitter or a journeyman high pressure pipefitter. A contracting high pressure pipefitter is a term defined to mean an individual engaged in the *planning, superintending, and practical installation* of high pressure piping and appurtenances, and lawfully *qualified to construct* high pressure piping *installations* and make *replacements to existing plants*, who is also qualified to conduct the business of

⁹⁴ *Manufactured Hous. Inst. v. Pettersen*, 347 N.W.2d 238, 242 (Minn. 1984); *In re Eigenheer*, 453 N.W.2d 349, 354 (Minn. App. 1990) (statutory authority given to DNR commissioner to protect public waters of the state is broad enough to permit prohibiting filling of protected water by rule at issue).

⁹⁵ *State v. Hopf*, 323 N.W.2d 746, 752 (Minn. 1982); *Mammenga v. Department of Human Servs.*, 442 N.W.2d 786, 792 (Minn. 1989) (commissioner has the authority to by rule interpret and limit secondary education program).

⁹⁶ *Green v. Whirlpool Corp.*, 389 N.W.2d 504, 506 (Minn. 1986).

⁹⁷ *Id.*; *Hirsch v. Bartley-Lindsay Co.*, 537 N.W.2d 480, 485 (Minn. 1995) (durational limits on medical care services in rule conflicted with the basic statutory medical benefits provision which has long been recognized to place no limitation on the duration of care, but rather to return the employee to pre-injury state); *Flores v. Department of Jobs & Training*, 411 N.W.2d 499, 504 (Minn. 1987) (department may not adopt a rule that conflicts or is inconsistent with the statute; rule imposing additional requirements is inconsistent with the statute).

⁹⁸ *United Hardware Distrib. Co. v. Commissioner*, 284 N.W.2d 820, 822 (Minn. 1979) (rules drawn too restrictively may fail because they are an unwarranted limitation on the statutory language; rule by the commissioner of revenue narrowing sales tax exemption based on what tax court considered to be "normal and common meaning" of term failed as unwarranted limitation not justified by statutory language).

⁹⁹ *Can Mfrs. Inst. v. State*, 289 N.W.2d 416, 424 (Minn. 1979).

¹⁰⁰ *Francis v. Minnesota Bd. of Barber Examiners*, 256 N.W.2d 521, 525 (Minn. 1977); *Drum v. Minnesota Board of Water and Soil Resources*, 574 N.W.2d 71, 73 (Minn. App. 1998) (wetland rules consistent with legislation and do not exceed statutory authority).

¹⁰¹ See proposed rule part 5230.0045, subp. 3.

high pressure piping *installations* and who is familiar with the laws, rules, and minimum standards governing them.¹⁰² A journeyman high pressure pipefitter means an individual employed by a contracting high pressure pipefitter who is engaged in the *installation* of high pressure piping and appurtenances.¹⁰³ The statute defines “high pressure piping” as high pressure piping *used in the installation of* hot water or steam heating boilers, any systems of piping hot water or other medium used for heating that exceed 30 p.s.i gauge and 250 degrees Fahrenheit, or any system of high pressure steam, ammonia piping, or bioprocess piping, but shall not include any high pressure piping under the direct jurisdiction of the United States.¹⁰⁴ The licensing statute further provides that the board “shall prescribe rules, not inconsistent herewith, for the examination and competency licensing of contracting high pressure pipefitters and journeyman high pressure pipefitters and for issuance of permits by the department and municipalities for the *installation* of high pressure piping.”¹⁰⁵

94. The Merriam Webster Collegiate Dictionary defines “repair” to mean “to restore by replacing a part or putting together what is torn or broken,” or to fix.¹⁰⁶ The word “construct” is defined to mean “to make or form by combining or arranging parts or elements: build.”¹⁰⁷ The word “install” is defined to mean “to set up for use or service.”¹⁰⁸ In addition, the statute distinguishes between “existing” installations and other installations. Words and phrases in a statute are to be construed according to their common and approved usage.¹⁰⁹ The commonly understood meaning of “repairs to existing installations” is to restore or fix something that is already set up for use or service. The Board’s definition of repair as the in-kind replacement of certain manufactured parts is more limited than the commonly understood meaning of the phrase. No part of the licensing statute distinguishes between repairs that require welding and those that do not.

95. In addition, the statutory provisions that require permits and allow the collection of inspection fees support the conclusion that construction and installation are terms that describe projects with a scope much larger than the repair of a cracked pipe or the replacement of a faulty valve in an existing plant. The permit requirement applies to persons who “construct or install” high pressure piping systems; and when an application for a permit is filed, the inspection fee is based on million dollar increments in the cost of construction or installation.¹¹⁰

96. Moreover, the legislation creating the Board provides it with authority to adopt rules that “regulate the licensure or registration of high pressure piping contractors, journeymen, and other persons engaged in the design, installation, and

¹⁰² Minn. Stat. § 326B.921, subd. 3 (emphasis added).

¹⁰³ *Id.*, § 326B.91, subd. 6 (emphasis added).

¹⁰⁴ *Id.*, § 326B.91, subd. 4 (emphasis added).

¹⁰⁵ Minn. Stat. § 326B.921, subd. 1 (emphasis added).

¹⁰⁶ Merriam Webster Online Dictionary (2009).

¹⁰⁷ *Id.*

¹⁰⁸ *Id.*

¹⁰⁹ Minn. Stat. § 645.08 (1). The Department has not argued that these words have a technical or special meaning.

¹¹⁰ Minn. Stat. § 326B.92, subs. 1 & 3.

alteration of high pressure piping systems.”¹¹¹ This rulemaking authority recognizes that unlicensed persons may “assist” in the construction or installation of high pressure piping and appurtenances if they are registered with the department and work only under the direct supervision of a licensed contracting high pressure pipefitter or licensed journeyman high pressure pipefitter employed by the same business, provided that the licensed employee shall supervise no more than two apprentices or registered unlicensed individuals.¹¹² This statute does not expand the licensing authority contained within Minn. Stat. § 326B.921, subd. 1.

97. The Board’s alternative reliance on the phrase defining a contracting high pressure pipefitter as someone who is qualified to “make replacements to existing plants” is insufficient to conclude that the Board may require licensure of any individual who performs welding. The Board would interpret “replacements to existing plants” to mean the same thing as “replacement of existing pipe,” a reading that is similarly at odds with the common meaning of the word. “Plant” is the land, buildings, machinery, apparatus, and fixtures employed in carrying on a trade or an industrial business; a factory or workshop for the manufacture of a particular product; the total facilities available for production or service; or the buildings and other physical equipment of an institution.¹¹³ The meaning of the word “plant” clearly encompasses more than the replacement of a broken pipe or a valve. Finally, the Board’s argument that welding work must be deemed to be an “installation” requiring a permit, so that timely inspection can be made, is misplaced. As noted above, the permitting process is explicitly targeted to construction and installation of projects of a magnitude many times greater than the fixing of broken parts.

98. The Administrative Law Judge concludes that while the Board would have the statutory authority to adopt a rule defining the phrase “repairs on existing installations,” it may not do so in a way that conflicts with Minn. Stat. § 326B.921, subd. 1. The Board’s definition is not consistent with the common meaning of the phrase, which is to restore or fix something (here, a high pressure piping system) that is already set up for use or service. The Board has acknowledged that much of the routine maintenance work in an existing plant consists of repairing cracked pipe or broken valves that must be cut out, replaced, and welded back into position. The Board believes this repair work requires a level of skill that merits licensure.¹¹⁴ From a policy perspective, the Board may have a compelling argument; but the Board’s obligation is to seek legislative approval for this policy, not to achieve its goal by adopting a rule that conflicts with the express provision of the statute. The Administrative Law Judge finds that the definition proposed by the Board places an unwarranted limitation on the explicit statutory licensing exemption for repairs and as such is inconsistent and conflicts with Minn. Stat. § 326B.921, subd. 1.

99. When an administrative rule conflicts with the plain meaning of a statute, the statute controls.¹¹⁵ In this matter, the Administrative Law Judge finds that the

¹¹¹ Minn. Stat. § 326B.925, subd. 2(5).

¹¹² Minn. Stat. § 326B.921, subd. 3.

¹¹³ Merriam Webster Online Dictionary (2009).

¹¹⁴ See Ex. 106 at 4.

¹¹⁵ *Special School Dist. No. 1 v. Dunham*, 498 N.W.2d 441, 445 (Minn. 1993).

Board's proposed definition of "repairs on existing installations" conflicts with the plain meaning of Minn. Stat. § 326B.921, subd.1, and is thus invalid. Neither the Board nor any other participant has proposed any alternative language that would cure this defect, and any language developed at this point in the proceeding would make the rule substantially different than the language as published. In any future rule proceeding, the Board should focus on a proposed definition that addresses the commonly understood meaning of the words "repairs on existing installations," as action taken to restore the function of a high pressure piping system that is already set up for service.

5230.5920 Qualification of Welding Procedures, Welders, and Welding Operators

100. This part combines welding qualification rules for all types of high pressure piping systems. The Board states that combining the welding qualifications into one rule part clarifies the rules and eliminates redundancy.

101. **Subpart 4. Retest and renewal of welder qualifications.** This subpart governs retesting and renewal of welder qualifications. It requires that welders and welding operators meet the qualifications, retest and renewal requirements set forth in ASME's 2007 revision of section IX of the Boiler and Pressure Vessel Code.

102. **Subpart 6. Evaluation standards.** This subpart requires that the welding procedure specification and procedure qualification record be objectively evaluated by and acceptable to the administrative authority. "Administrative authority" is defined as the "inspection agency authorized to inspect high pressure piping."¹¹⁶

103. **Subpart 8. Welder identification and log requirement.** This subpart requires that welders qualified for a project be assigned a unique identification symbol and that each weld be stamped or marked with the welder's identification symbol. In addition, a welding log must be maintained as set forth in ASME section IX.

104. In its SONAR, the Board states that subparts 3-9, which govern welder qualifications, retesting, documentation, and contractor responsibility, are comparable to current rule provisions and are merely reorganized under this part. The Board cites the comparable current rules for each proposed subpart.¹¹⁷

105. In written comments, Xcel states that the current rule parts referenced by the Board as being comparable to the proposed rule parts apply only to ammonia refrigeration systems and not to high pressure piping systems. Xcel maintains that it is not reasonable to apply these parts to high pressure piping when they are not currently applicable. In addition, Xcel states that there is no basis in statute or ASME code to support requiring evaluation of welding documents by the Department in proposed subpart 6, and it questions whether Department staff will have the training necessary to objectively evaluate ASME section IX welding documents. Moreover, Xcel objects to the requirement in proposed subpart 8 that each weld be stamped or marked with a welder's unique identification symbol. Xcel states that there is no requirement in ASME

¹¹⁶ Proposed Rule 5230.0005, subp. 2.

¹¹⁷ SONAR at 15-16.

section IX or ASME B31.1 obliging a welder to stamp or mark a symbol on the welder's work.¹¹⁸

106. In its written response, the Board argues that proposed Rule 5230.5920 is needed and reasonable. The Board states that the proposed rule was modeled on the current rule concerning welding on ammonia refrigeration systems (existing rule 5230.5925) because that language is more up-to-date than the language in the code applicable to other high pressure piping systems. With respect to Xcel's objection to the Department's evaluation of welding documents, the Board states that all of the Department's HPP inspectors are certified welding inspectors and have the training necessary to objectively evaluate welding documents. In addition, the Board contends that the evaluation of welding documents is needed and reasonable because the Department has found serious problems with incomplete welding specifications, and the failure of welding to meet welding procedure specifications. Finally, with respect to Xcel's objection to the requirement in proposed subpart 8 that a welder's identification symbol be marked on the work, the Board states that this requirement already exists in rule both for ammonia refrigeration piping and for other high pressure piping.¹¹⁹ According to the Board, marking welder identification symbols is needed and reasonable to assist inspectors in determining which welder prepared which welds, and expedite the process of preventing future welding errors by the same welder. In addition, the Board states that a mark can easily be applied with a grease pencil and will not introduce defects to the piping material.¹²⁰

107. The Administrative Law Judge finds the proposed language of 5230.5920 to be needed and reasonable.

108. The Board has proposed correcting a typographical error in line 23.10 of the proposed Effective Date provision at the end of the proposed rules, indicating that the reference to "subpart 6" of part 5230.0005 is incorrect and should be changed to "subpart 16." The sentence refers to when the proposed definition of "Repairs on Existing Installations" shall take effect. Because the Administrative Law Judge has found subpart 16 to be defective, there is no need to reference the effective date of this subpart.

Based upon the foregoing Findings of Fact, the Administrative Law Judge makes the following:

CONCLUSIONS

1. The Board gave proper notice of the hearing in this matter.
2. The Board has fulfilled the procedural requirements of Minnesota Statutes § 14.14 and all other procedural requirements of law or rule.
3. The Board has demonstrated its statutory authority to adopt the proposed rule and has fulfilled all other substantive requirements of law or rule within the meaning

¹¹⁸ Exs. 49-70, and 90-93.

¹¹⁹ See Minn. R. 5230.1070, subp. 13; 5230.5925, subp. 14.

¹²⁰ Ex. 106 at 15.

of Minn. Stat. §§ 14.05, subd. 1, 14.15, subd. 3, and 14.50 (i) and (ii), except as noted at Findings 33, 34, 43, 98, and 99.

4. The Board has documented the need for and reasonableness of its proposed rule with an affirmative presentation of facts in the record within the meaning of Minn. Stat. §§ 14.14, subd. 2, and 14.50 (iii), except as noted at Findings 33, 34, 43, 98, and 99.

5. That due to Conclusions 3 and 4, this Report has been submitted to the Chief Administrative Law Judge for his approval pursuant to Minn. Stat. § 14.15, subd. 3.

6. Any Findings that might properly be termed Conclusions and any Conclusions that might properly be termed Findings are hereby adopted as such.

Based upon the foregoing Conclusions, the Administrative Law Judge makes the following:

RECOMMENDATION

IT IS HEREBY RECOMMENDED that the proposed rules be adopted except where specifically otherwise noted above.

Dated: April 3, 2009

s/Kathleen D. Sheehy
KATHLEEN D. SHEEHY
Administrative Law Judge

NOTICE

The Department must make this Report available for review by anyone who wishes to review it for at least five working days before the Department takes any further action to adopt final rules or to modify or withdraw the proposed rules. If the Department makes changes in the rules other than those recommended in this report, it must submit the rules, along with the complete hearing record, to the Chief Administrative Law Judge for a review of those changes before it may adopt the rules in final form.

The Administrative Law Judge has determined that the defect in the proposed rule cannot be corrected without the rule being substantially different from those originally published in the *State Register*. If this determination is upheld by the Chief Administrative Law Judge, the defective rule part cannot be adopted and the Board must initiate a new rulemaking proceeding to address that rule part. The Department may proceed to adopt all other portions of the proposed rules. After adopting the final version of the rules, the Department must submit them to the Revisor of Statutes for a review of their form. If the Revisor of Statutes approves the form of the rules, the Revisor will submit certified copies to the Administrative Law Judge, who will then

review them and file them with the Secretary of State. When they are filed with the Secretary of State, the Administrative Law Judge will notify the Department, and the Department will notify those persons who requested to be informed of their filing.